

REMARKS

Applicants thank the Examiner for the courtesies he extended during the interview held on December 8, 2008. During the interview the Examiner and applicants' representatives Jonathan Bockman and inventor Akihiro Mochizuki discussed the differences between the cited art and the prior art as detailed below.

Claims 1-7, 32 and 33 stand rejected under 35 USC 112, second paragraph, as being indefinite. Specifically, the Examiner contends that the recitations of "shows almost no spontaneous polarization ...under the absence of an externally applied voltage" is indefinite since the test referred to in the claim is not well defined. Claim 1 has been amended to include the test for showing almost no spontaneous polarization under the absence of an externally applied voltage. Specifically, claim 1 recites that this characteristic is tested by applying a triangular voltage of 0.1 Hz, 5V at 24°C and determining whether a substantially peak-shaped current is absent. This test is shown in FIG. 13 and described on page 23, line 24 to page 24, line 22 of the specification. Since the test for showing "almost no spontaneous polarization ...under the absence of an externally applied voltage" is now recited in the claim, this rejection should be withdrawn.

Claim 1 stand rejected under 35 USC 102(b) as being anticipated by Bauer. Claims 3-5, 32 and 33 stand rejected under 35 USC 103(a) as being unpatentable over Bauer in view of official notice. These rejections are respectfully traversed.

Claim 1 has been amended to specify that the liquid crystal material is a ferroelectric liquid crystal material. This limitation was previously recited in claim 2, which has been canceled. Bauer describes non-ferroelectric liquid crystals, not ferroelectric liquid crystals. Accordingly, the rejection of claim 1 should be withdrawn. The rejections of claims 3-5 and 32, which depend from claim 1, should similarly be withdrawn. Claim 33 has been canceled.

Claims 1-6, 32 and 33 stand rejected under 35 USC 102(b) as being anticipated by Takatori. Claims 1-6, 32 and 33 stand rejected under 35 USC 102(b) as being anticipated by Takatori. Claims

1-3, 32 and 33 stand rejected under 35 USC 102(b) as being anticipated by Tanaka. Claim 7 stands rejected under 35 USC 103(a) as being unpatentable over Takatori in view of Kitayama. Claims 6 and 7 stand rejected under 35 USC 103(a) as being unpatentable over Tanaka in view of Kitayama. Claims 4 and 5 stand rejected under 35 USC 103(a) as being unpatentable over Tanaka in view of Takatori. These rejections are respectfully traversed.

As stated in amendment dated March 24, 2008, and as shown in Mr. Mochizuki's declaration that accompanied that amendment, the materials described in Takatori, Tanaka, and Kitayama, all show a peak-shaped current, when a triangular voltage form is applied to the devices. That is, these liquid crystal devices were characterized by showing a feature that corresponds to Fig. 13 of the instant application.

As explained during the interview, Takatori, Tanaka, and Kitayama describe products in which the crystals have spontaneous polarization but the polarizations cancel out, meaning that the polarization of the bulk material is zero. The individual crystals within the devices, however, still have polarization. This is why these materials showed the peak-shaped current, when the triangular voltage is applied to the devices. Accordingly, Takatori, Tanaka, and Kitayama fail to disclose or suggest a device that does not show no spontaneous polarization which is perpendicular to the pair of substrates under the absence of an externally applied voltage under the claimed test conditions.

Accordingly, the rejections of claims 1, 3-7, and 32, should be withdrawn.

In view of the above, each of the claims in this application is in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and

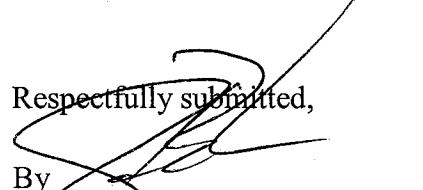
authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no.

**350292001900.**

Dated: January 12, 2009

Respectfully submitted,

By

  
Jonathan Bockman

Registration No.: 45,640

MORRISON & FOERSTER LLP

1650 Tysons Blvd, Suite 400

McLean, Virginia 22102

(703) 760-7769